JET Meeting Minutes
September 15, 2015

Participants

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Action Items
1. If anyone knows of a good QSFP28 please let the JET members know.
2. Bobby Cates will arrange for a DHS presentation on TICs to the JET after DHS has made their impending announcement.

Proceedings
      This meeting of the JET was coordinated by Grant Miller & Paul Love of the NCO.

Network Roundtable
CAAREN: Andrew Gallo
      CAAREN is functioning well. They are working on getting 40G data from the Netherlands (they will coordinate with Dale Finkelson). They are building out 100G aggregation capability and are seeking experience with Melanox equipment.   Discussion identified that Joe Mambretti has experience with the Melanox equipment that he will

share with Andrew Gallo. Joe Mambretti likes Inventec which is based on the Broadcom Tomahawk chip. It has a 3 TBPS backbone and costs $11,000 (without optics.) They need QSFP28s. Juniper said they have QSFP28 capability

AI: If anyone knows of a good QSFP28 please let the JET members know.

Internet2: Grover Browning
The Internet2 routed network over Juniper equipment has recently been upgraded to R.3R10 to eliminate bugs. There was a brief outage of Internet2 in the LA area due to a generator fuel refill. The incident is being investigated. A direct"express" link between Atlanta and DC had been added for needed bandwidth as the existing link was approaching 40% as the fall semester was starting. Chicago and Ashburn are getting full TransitRail-Commercial Peering Service (TR-CPS). Internet2 is planning link upgrades in Texas to increase capacity on heavily used links.

NIH: Don Preuss & Mike Gill
Nothing new to report

Pacific Wave: Jonah Keough
Nothing new to report

3ROX: Michael Lambert
3ROX has experienced hardware performance issues. The XSEDE network perfSONAR boxes have shown anomalous behavior. They see line rate up to approximately 5K MTU. Throughput then declines until, as you approach 9K, performance drops to about 100 megs. This is also being seen at Penn State and appears to be related to VRFs. This anomaly appeared with a new software upgrade.

US Ignite: Glenn Ricart
US Ignite is working to connect 15 Smart Cities together leveraging GENI and SDN capabilities and an NSF award.

ACE: Andrew Lee
ACE received a 1-year no-cost extension which is funding their 6th year. They turned down the 30G NY to Amsterdam link. They are maintaining their 30G WIX to Frankfurt link. They are currently experiencing 20G of traffic over this link.

TransPac: Hans Addelman
TransPac is evaluating 100G options, currently under NDA. They are doing NetFlow statistical evaluations. The Japan link is experiencing 50% loading to Japan and 20% loading from Japan.

NRL: Linden Mercer
Nothing beyond being glad to be participating in the SC demos.

Utah: Joe Breen

No update

NGIX Round Tables
Pacific NorthWest GigaPoP: Jonah Keough
The PNWGP is operating normally

Ames: Bobby Cates
DREN is upgrading their Ames NGIX capacity to 10G using CenturyLink. They are implementing a new power feed to provide facility diversity. A TIC announcement from DHS is expected later this month. After the announcement Bobby Cates will arrange a presentation to the JET

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StarLight: Joe Mambretti
StarLight is building out their SDX. Under an NSF IRNC grant they are building an international SDX that will be showcased at SC15. The Pacific Research Platform, in coordination with PacificWave, will integrate science DMZs across California with extensions to other sites, including StarLight. Joe Mambretti, along with many national and international partners is preparing about 15 100G demonstrations at SC15, including many SDN demonstrations. His booth will have 3 x 100G connectivity from StarLight. There will be additional ESnet and CenturyLink 100G connections to the booth.
There is a new 74M digital manufacturing facility that has implemented dark fiber to StarLight, called UILnet (University of Illinois network).

Internet2 Exchange Points: Dale Finkelson
Internet2 is implementing NSI capabilities into MAN LAN and WIX. MAN LAN has been completed. They are working to implement NSI on the WIX. They are working to implement VLAN translation capabilities at the NSI points. Tom Lehman is helping to implement a prototype SDX capability at the WIX. They are working with ESnet to implement AutoGOLE. The new 100G Trans-Atlantic link is working well. The three Trans-Atlantic 100G links land in London, Amsterdam, and Paris and all three are experiencing traffic of 20-30 Gbps.

LSN Update: Grant Miller
The President's Council of Advisers on Science and Technology (PCAST) has requested changes to the budgets reported annually for NITRD by the President. Networking infrastructure (e.g., ESnet, DREN/HPCMO, N-Wave, NIH Bioinformatics networks and other) will be reported this year.
The Emerging Technology Coordination (ETC) focus group is meeting by teleconference to write the workshop report for the Berkeley SDN workshop. This report will provide a roadmap for development of heterogeneous, dynamic, Interdomain SDN functioning. Grant Miller will forward the report to the JET when it is available.

Network Soft Failures: Grover Browning

Internet2 has received a vendor report that indicates the vendor has identified the cause of the soft hardware failures experienced on the Internet2 network. Traffic patterns and noise on the interface card lead to interface lockup and dropping of packets. Newer line cards provide additional shielding and do not experience this failure. This issue shows up only on the Brocade 100G line cards, model: BR-MLX-100GX2-

Meetings of Interest:

September 21-23	CANS2015, Chengdu, China
September 28-30	ESCC, Austin, TX
Sep 29-Oct 1	Global Lambda Integrated Facility Workshop (GLIF), Prague, Czech Republic
October 4-7	Technology Exchange, Cleveland, OH
October 5-7	NANOG65, Montreal, QC, Canada
October 8-9	ARIN 36, Montreal, QC, Canada
November 1-6	IETF94, Yokohama, Japan
November 15-20	SC15, Austin, TX
December 10-11	GENI Future Plans Workshop, Washington, DC

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February 8-10	NANOG66, San Diego, CA
April 3-8	IETF95, Buenos Aires, Argentina
April 17-20	ARIN 37, Montego Bay, Jamaica

Next JET Meetings:

Oct 20	12:00-2:00, NSF
Nov 17	1:30-3:30 CST, Austin Convention Center, Austin TX
	nb: This is concurrent with SC15
Dec 15	12:00-2:00, NSF
	nb: Held iff something unexpected dictates the need